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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,974

07/28/2003

John Schrag

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EXAMINER

AUGUSTINE, NICHOLAS

ART UNIT

PAPER NUMBER

2179

MAIL DATE

DELIVERY MODE

05/18/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/627,974	<b>Applicant(s)</b> SCHRAG ET AL.	
	<b>Examiner</b> Nicholas Augustine	<b>Art Unit</b> 2179	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

- A. This action is responsive to the following communications: Amendment filed 03/05/2007. **This action is made final.**
- B. Claims 1-15 is pending.
- C. Applicant did, not address claim objections for claims 2-8.

#### ***Claim Objections***

- 1. Claims 2-8 are objected to because of the following informalities: "an element as recited in claim 1" should be changed to read "The graphical user interface element as recited in claim 1" or "The element as recited in claim 1". Appropriate correction is required to avoid a claim rejection.

#### ***Claim Rejections - 35 USC § 102***

- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

- 3. Claims 1-9 and 11-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Wang et al (US 6,597,380 B1).

As for independent claim 1, Wang teaches a graphical user interface element (fig.5, 92), comprising: an orientation indicator associated with a three-dimensional scene and visually indicating an orientation of the scene (93-94), and comprising: view direction controls each indicating a direction of a corresponding view into the three-dimensional scene and causing a display view of three-dimensional scene to change to the corresponding view when selected (fig.7a-b) It is well appreciated to those skilled in the art that figure 5 depicts multiple cameras which feature viewpoints based on initial installation of software and user defined positioning, it is also well appreciated that the actual position laid out in the current view point provides for an easier navigation technique, though both solve the same problem and share close parameters of functionality.

As for dependent claim 2, Wang teaches an element as recited in claim 1, wherein an object in the scene is centered and sized to fit the display view when a scene change occurs responsive to selection of one of the controls (fig.7B; the view of the object as set/ defined from the position of the camera much like that of being in a set coordinates which indicated the position of the object that this object is positioned to occupy the give amount of screen real-estate, also the use of the said cameras placement allows for further more in-depth view of an object in three dimensional space as depicted in figure 7H).

As for dependent claim 3, Wang teaches an element as recited in claim 1,

wherein the indicator is part of the three-dimensional scene, always positioned at a predetermined position in the display view and always substantially a same size in the display view (as noted above in claim 2, said cameras are positioned in that away of defined by installation of software or by user interactivity thus allowing a set configuration of said camera to view at a certain coordinates and angle as depicted in figure 7A-H and means by figure 6).

As for dependent claim 4, Wang teaches an element as recited in claim 1, wherein the element comprises: a central core control associated with a perspective view of the scene (41); and axial controls peripherally positioned with respect to the core control (fig.5), aligned with the axial dimensions of the scene (fig.5) and associated with corresponding front, back, top, bottom, left side and right side views (fig.5; Note the initial viewpoint created makes up to be a core center piece control the first of area which controls the overall control hence being the initial control, the other controls are positioned to cover all desired areas, in this case all around the object this is also appreciated as being positioned in a 3D space related to the initial control as well being is a defined located making for the controls to also be aligned in a certain location in the current scene.

As for dependent claim 5, Wang teaches an element is recited in claim 4, wherein the front direction control is different from the other controls (fig.7A-D).

As for dependent claim 6, Wang teaches an element as recited in claim 4, wherein the axial controls are each shaped to point at the core control indicating the view direction of the axial control (fig.5; the controls are pointing to the object as depicted in figure 5).

As for dependent claim 7, Wang teaches an element as recited in claim 4, further comprising a non-axial control peripherally positioned with respect to the core control and indicating a direction of a corresponding view into the three-dimensional scene and causing a display view of three-dimensional scene to change to the corresponding view when selected (fig.5 and fig.7A-H).

As for dependent claim 8, Wang teaches an element as recited in claim 7, wherein the non-axial controls are specified by a user (col.4, line 41).

As for dependent claim 9, Wang teaches a process (fig.10), comprising: determining whether a view direction indicating control of an orientation indicator in a display view of a three-dimensional scene has been activated (fig.10, col.11, line 28); and orienting the display view to the view direction of the control when the control is activated (fig.10, col.11, line 19).

As for dependent claim 11, Wang teaches a process as recited in claim 9, further comprising: centering a scene object in the display view; and fitting the scene object to the display view (col.7, lines 27-30).

As for independent claim 12, Wang teaches a system (col.1, line 8), comprising: display (15); an input device used to make selections on the display (11); and a computer coupled to the mouse and the display (fig.1), displaying a three-dimensional scene on the display in a display view (15), the scene comprising an orientation indicator indicating the orientation of the scene (fig.5), the orientation indicator comprising view controls indicating a view direction and the computer changing the display view to the view direction associated with a control selected by the mouse (fig.1, 11 and fig.5).

As for independent claim 13, Wang a computer readable storage controlling a computer by a process stored thereon determining whether a view direction indicating control of an orientation indicator in a display view of a three-dimensional scene has been activated and orienting the display view to the view direction of the control when the control is activated (fig.1, 202, 22, 21, 23, 205 and 15).

As for independent claim 14, Wang teaches a graphical user interface having

three-dimensional directorial indicators indicating an orientation of a three-dimensional scene and that orient the view to the direction indicated when activated by a user (fig.5 and fig.7A-H).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al in view of AutoCAD.



As for dependent claim 10, Wang teaches a process as recited in claim 9, wherein the indicator is in the three dimensional scene and the process further comprises: positioning the indicator in the scene to place the indicator in a predetermined position in the display view (col.4, line 41); Wang does not specifically mention changing the size of the indicator in the scene to fix the indicator at a predetermined size in the display view whereas however in the same field of endeavor AutoCAD teaches the changing of size of the indicator as noted in the visual difference from figure 25.1 and figure 11.16; those skilled in the art will appreciate that the viewpoint real-estate changes effect the size of the indicator thus making the indicator fixed at a certain set ratio of screen real-estate from the viewpoint. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the use of icon from AutoCAD into the system of Wang, this is true because AutoCAD uses a viewpoint window for viewing objects that which of for ease ability includes an icon to show screen orientation much of the like of Wang (page16, par.3).

As for independent claim 15, Wang teaches a graphical user interface element, comprising: an orientation indicator associated with a three-dimensional scene, visually indicating an orientation of the scene, part of the three-dimensional scene, always positioned at a predetermined position in the display view and always substantially a

same size in the display view, and said indicator comprising: view direction controls each indicating a direction of a corresponding view into the three-dimensional scene and causing a display view of three-dimensional scene to change to the corresponding view when selected, the view direction controls comprising: a central core control associated with a perspective view of the scene and causing a display view of three-dimensional scene to change to the corresponding perspective view when selected; axial controls peripherally positioned with respect to the core control, aligned with the axial dimensions of the scene, associated with corresponding front, back, top, bottom, left side and right side views shaped to point at the core control indicating the view direction of the axial control (note the analysis of claims 1-14 above), and a non-axial control peripherally positioned with respect to the core control by a user and indicating a direction of a corresponding view into the three-dimensional scene and causing a display view of three-dimensional scene to change to the corresponding non-axial view when selected, and wherein an object in the scene is centered and sized to fit the display view when a scene change occurs responsive to selection of one of the controls (note the analysis of claims 1-14 above). Wang does not specifically mention the different orientation icons being that of different colors although this is well known in the art to practice AutoCAD however in the same field of endeavor discloses an indicator of screen orientation of different color as depicted in figure 24.4. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the indicator different color of AutoCAD into the system of Wang, this is true because

AutoCAD uses a viewpoint window for viewing objects that which of for the ease ability includes an icon to show screen orientation much of the like of Wang (page16, par.3).

### ***Response to Arguments***

Applicant's arguments filed 03/05/2007 have been fully considered but they are not persuasive.

- Applicant did, not address claim objections for claims 2-8
- *Applicant argues that Wang does not disclose user selection of a view for an object in space.*
- Examiner does not agree Wang discloses a "user management means" wherein is to generate a space updating request (changes to the display device, new rendering, etc...) on the basis of the user operation information (signals to the computer) from the operation input device (mouse, keyboard, I/O device of any kind and be implemented) and the current display content (3D model as depicted in figure 7). The space-updating request (rendering, etc) is a request for example changing a viewing direction and a viewpoint position within a three-dimensional space. The three-dimensional space visualizing means is for updating the state of a three-dimensional space so that new information (view of a model) can

be displayed in response to the space updating request (user indicates a view to be displayed) col.4, lines 54-67 and col. 5)

- *Applicant argues the Wang does not disclose a user interface, wherein the user makes use of a control to change screen orientation.*
- Examiner disagrees, Wang discloses a control for the user to interact with (viewpoint information determination means that gets information out of the recommend vector storage means about recommended vectors located in a three-dimensional space visualizing means. Wang also goes into when the user selects a recommended vector (which are positions around a model like "top", "bottom", "side", etc...) that the order of frames is calculated to show the movement in an efficient way. Such as if user is in initial vector and chooses to view angle 3 then the system calculates and gives the order of rotation to render to the screen, the user is presented with a visual rotation of the model from initial vector to angle 3 (col.5, lines 14-41; col.6; col.7, lines 20-55; col.13, lines 64-67 and col.14, lines 1-18)
- *Applicant argues Wang does not disclose the user interacting with a three-dimensional space .*
- Examiner disagrees, note the above arguments along with user interaction as taught by Wang found in the provided by the

mentioned reference here (col.4, lines 54-67; col.5, lines 1-13;col.6, liens 3-4; col.7, lines 20-56; col.8, lines 16-18). Wherein the user selects a recommended vector to rotate the display/ change screen orientation around an object.

- *Applicant points out that the teachings of Wang are confusing.*
- Examiner reminds Applicant that it is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006,1009, 158 USPQ 275, 277 (CCPA 1968)).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

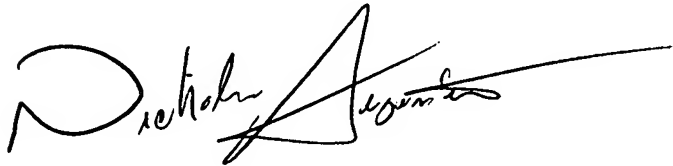
***Inquires***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056. The examiner can normally be reached on Monday - Friday: 7:30- 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

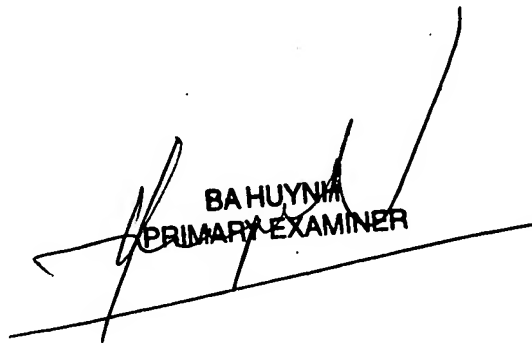
Art Unit: 2179

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



N. Augustine  
May 9, 2007

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